

Amendments to the Specification

Please replace the paragraph beginning at page 8, lines 21-30 and page 9, lines 1-17, with the following rewritten paragraph:

Fig. 7 illustrates a truck tractor 10 with a front axle 12 with wheels P1, D1 at the respective first and second sides of a longitudinal centerline 40 of the vehicle. The tractor 10 also has rear axles 14,16 (axle 14 being forwardly of axle 16). The axles 14,16 are two axles of a tandem axle pair. Axle 14 has two wheels (one of which is designated P2) at the first side of the vehicle and two wheels (one of which is designated D2) at the second side of the vehicle. Similarly, axle 16 has two wheels at the first side of the vehicle (one of which is designated P3) and two wheels at the second side of the vehicle (one of which is designated D3). Respective first and second parking brakes are shown in the embodiment of Fig. 7. The first parking brake is designated B1 and is located to brake the wheels D2 of axle 14. The second parking brake is designated B2 and is located to brake the wheels P3 of axle 16. When a parking brake actuator such as a lever 44 is shifted by a vehicle operator or otherwise controlled to apply the parking brakes, a controller 46 delivers parking brake application signals resulting in the application of the parking brakes B1 and B2. Alternatively, the lever may be mechanically connected to the brakes B1 and B2. In one specific approach, when the parking brakes are operated, valves at B1 and B2 are controlled to bleed air from a compartment of a brake actuator. This allows a spring or other biasing mechanism to apply the parking brakes at the wheels P3 and D2. If a brake pedal (not shown) or other applicator is operated to apply the service brakes of the vehicle, in this example, valves are controlled to supply pressurized air to one compartment of a brake actuator at brake B1 and also at brake B2. The application of pressurized air to this compartment of the actuator results in the application of the service brakes. Service brakes for the wheels D2, P2, P3 and D3 are respectively indicated schematically by the dashed line designations S1, S2, S3 and S4 in Fig. 7. The parking brake application system is not limited to a specific type of parking brake applicator or parking brake actuator. A system is suitable when operable to apply parking brakes in the desirable manner of the embodiments described above.

Claims

1. (Previously Presented) A method of parking a vehicle having both service brakes and parking brakes, the method comprising:

applying a first parking brake to brake at least one wheel attached to a first end portion of a first axle at one side of the vehicle without applying a parking brake to any wheel at the other end portion of the first axle opposite to said one end portion of the first axle; and

applying a second parking brake to brake at least one wheel attached to a second end portion of a second axle at a second side of the vehicle opposite to the first side of the vehicle; and

permitting the application of the service brakes to said at least one wheel attached to a first end portion of the first axle and to said at least one wheel attached to a second end portion of the second axle while the first and second parking brakes are applied.

2. (Original) A method according to claim 1 wherein the second parking brake is applied without applying a parking brake to any wheel at a first end portion of the second axle which is opposite to said second end portion of the second axle.

3. (Original) A method according to claim 1 wherein the first and second axles comprise a tandem pair of axles.

4. (Currently Amended) A method of parking a tandem rear axle vehicle having both parking brakes and service brakes comprising:

applying a first parking brake to brake at least one wheel attached to a first end portion of a first axle at one side of the vehicle without applying a parking brake to any wheel at the other end portion of the first axle opposite to said one end portion of the first axle; and

applying a second parking brake to brake at least one wheel attached to a second end portion of a second axle at a second side of the vehicle opposite to the first side of the vehicle; and

~~A method according to claim 3~~ wherein the first and second parking brakes are the only parking brakes on the vehicle at the wheels of the rear tandem axle; and

wherein the service brakes are not used as both parking brakes and service brakes.

5. (Current Amended) A method according to claim [4] 1 wherein there are at least two wheels attached to the first end portion of the first axle and at least two wheels attached to the second end portion of the second axle and wherein the first parking brake is applied to brake all of the wheels attached to the first end portion of the first axle and the second parking brake is applied to brake all of the wheels attached to the second end portion of the second axle.

6. (Original) A method according to claim 1 wherein the first and second parking brakes are simultaneously applied.

7. (Currently Amended) A method of parking a vehicle having both parking brakes and service brakes comprising:

moving the vehicle to a location where it is to be parked; ~~and~~
~~only applying parking the vehicle with the only parking brakes applied being the parking~~
brakes of diagonally disposed wheels coupled to a set of tandem axles; ~~and~~
permitting the application of service brakes to wheels of the vehicle including said
diagonally disposed wheels while the parking brakes are applied.

8. (Currently Amended) A method of applying parking brakes to a vehicle having a longitudinal axis and first and second axles, the first axle being forward of the second axle, the method comprising:

applying a first parking brake to a first wheel of one of the first and second axles;
applying a second parking brake to a second wheel of the other of the first and second axles, the second wheel being at the opposite side of the longitudinal axis from the first wheel;
~~and~~
wherein the first and second parking brakes are the only parking brakes that are applied;
and
releasing a parking brake lever to release the parking brakes.

9. (Currently Amended) A method of parking a vehicle having both parking brakes and service brakes comprising:

moving the vehicle to a location where it is to be parked;

~~only~~ applying the parking brakes of diagonally disposed wheels coupled to a set of tandem front and rear axles without any other parking brakes; and

wherein the act of applying the parking brakes comprises applying the parking brake to at least one wheel on the front axle ~~A method according to claim 7 wherein the first wheel is located at the side of the longitudinal axis of the vehicle which is heaviest when the vehicle is unloaded and the second wheel is~~ applying the parking brake to at least one wheel on the rear axle located at the side of the longitudinal axis of the vehicle which is lightest when the vehicle is unloaded; and

permitting the application of service brakes to wheels at both end portions of the front and rear axles while the parking brakes are applied to said at least one front and at least one rear wheel.

10. (~~Allowed~~ Currently Amended) A method of applying parking brakes to a moving vehicle having both parking brakes and service brakes comprising:

applying a ~~braking~~ parking brake to apply a parking brake force at a first location at one side of a vehicle corresponding to the heaviest side of the unloaded vehicle;

applying a parking brake to apply a parking brake ~~braking~~ force at a second location at a second side of a vehicle corresponding to the lightest side of the unloaded vehicle; ~~and~~

wherein the first location is forwardly of the second location and wherein the parking brakes are operated such that the parking brake forces applied by parking brakes are only applied at the first and second locations; and

permitting simultaneous application of the parking brakes and service brakes at said first and second locations.

11. (Allowed) A method of applying parking brakes to a moving vehicle traveling in a first direction comprising:

determining the side of an unloaded vehicle at which the center of gravity of the unloaded vehicle is located relative to the longitudinal centerline of the vehicle; and

applying first and second braking forces to respective first and second wheels at opposite sides of the vehicle, the first and second wheels being at different distances from the front of the vehicle and being selected so as to reduce the tendency of the vehicle to travel other than in the first direction upon the application of braking forces as a result of the vehicle having a center of gravity at one side of the longitudinal centerline of the vehicle.

12. (Allowed) A method of parking a vehicle having parking brakes and service brakes, comprising:

applying a first parking brake to brake at least one wheel attached to a first end portion of a first axle at one side of the vehicle without applying a parking brake to any wheel at the other end portion of the first axle opposite to said one end portion of the first axle;

applying a second parking brake to brake at least one wheel attached to a second end portion of a second axle at a second side of the vehicle opposite to the first side of the vehicle;

wherein the first and second parking brakes are the only parking brakes on the vehicle;
and

wherein the first and second parking brakes are operable without operating an applicator that applies the service brakes of the vehicle.

13. (Allowed) A method according to claim 10 comprising the act of applying the parking brake forces while service brakes are also applying service brake forces to the moving vehicle.

14. (Allowed) A method according to claim 10 comprising the act of simultaneously applying the parking braking forces at the first and second locations.